

### REMARKS

This communication responds to the Office Action mailed on January 31, 2008. Claims 1, 4-7, 11 and 13-14 are amended, claims 3 and 12 are canceled, and no claims are added in this communication. As a result, claims 1-2, 4-11, and 13-22 are now pending in this Application.

#### §103 Rejection of the Claims

Claims 1-22 were rejected under 35 USC § 103(a) as being unpatentable over EP0928084 A2 (Mitsubishi Denki Kabushiki Kaisha (Inventors: Poon et al., hereinafter “Poon”) in view of Kobayashi (U.S. 2004/0218627 A1, hereinafter “Kobayashi”). The Applicant does not admit that Poon and Kobayashi are prior art, and reserves the right to swear behind these references in the future. In addition, since a *prima facie* case of obviousness has not been established in each case, the Applicant respectfully traverses this rejection.

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. M.P.E.P. §2143.03 (citing *In re Royka*, 490 F.2d 981 (CCPA 1974)).

Amended claim 1 recites, with emphasis added:

1. A method, comprising:  
**determining whether a state capable of interpreting a selected data type has been maintained by a receiver;**  
sending the selected data type **without self-definition information** to the receiver **if the state capable of interpreting the selected data type has been maintained by the receiver;** and  
sending the selected data type with the self-definition information to the receiver **if the state capable of interpreting the selected data type has not been maintained by the receiver.**

The various embodiments claimed by the Applicant, and taught by the Specification (e.g., Fig. 1, and paragraph [0016]) may operate to send data 118 from a transmitter 114 to a receiver 122, in which the data 118 may be sent with self-definition information 126, or not, depending on whether a determination has been made as to whether a particular state 134 has been maintained by the receiver 122. However, referring to the Abstract and Fig. 12 of Poon, it can be seen that Poon uses a controller 208 to control the modulation type on both the transmit side 200

and receive side 202 with means provided to sense channel noise and change the modulation type accordingly. Thus, Poon does nothing with respect to maintaining a state capable of interpreting the input signal (a selected data type) for the receiver 202. Accordingly, Poon and the embodiments claimed by the Applicant adopt different approaches.

The Applicant respectfully submits that Poon does not disclose the feature of **“determining whether a state capable of interpreting a selected data type has been maintained by a receiver”**, which is incorporated from original claim 3. While the Office asserts that Poon discloses, *“determining if the receiver maintains a state capable of interpreting the selected data type”*, relying upon Poon, paragraph [0038], col. 3, lines 1-10, col. 5, lines 10-18 and col. 8, lines 9-12, a close reading of the cited portions reveals that this is not true. For example, consider the following, taken from Poon:

[0038] Referring now to Figure 5A, in one embodiment, the receive side of the universal modem includes an input 70 from tuner 71 which is coupled to a front end 72 whose primary purpose is level adjustment, amplification and filtering of the incoming signals from the tuner. Note that the tuner is set to a given channel by channel select 73. The output of front end 72 is coupled to A-D converter 82, and thence to software-configurable demodulator 84. Additionally, in one embodiment, the header of the input signal is stripped off and provided to a host processor 74 which determines from flags in the header the modulation format type. Alternatively, the host processor can determine the modulation format through channel input 76 from the channel select 73. In either event, the output of the host processor specifies the modulation format to a configuration controller 78, the purpose of which is to select from a configuration RAM 80 the appropriate demodulation mode to be downloaded to demodulator 84.

Col. 3, lines 1-10, Poon:

Thus if the receiver is tuned to a given channel, then the universal modem is reconfigured to the expected format of signals on that channel. This is done on an a priori basis since different groups of channels have different standardized formats.

Alternatively, the host computer can detect the format of the incoming signal by detecting a flag in the header of the incoming data stream indicating modulation type, assuming one is loaded into the header at the transmit side.

Col. 5, lines 10-18, Poon:

In the receive mode, the universal modem detects the modulation format of the incoming signal and reconfigures the logic of this software-configurable demodulator to output demodulated digital data for further processing. In the

transmit mode, information to be transmitted is provided with the appropriate modulation format by setting a software-configurable modulator in the universal modem to the particular format.

Col. 8, lines 9-12, Poon:

The universal modem is thus provided with configuration control signals derived either through a priori knowledge of the modulation type associated with a channel or actual detection of format flags.

The Applicant cannot find any part of the above excerpts, relied upon by the Office, where Poon teaches or suggests that the receiver has the capability of interpreting an input signal (a selected data type), much less disclosing “**determining whether a state capable of interpreting a selected data type has been maintained by a receiver**” as claimed by the Applicant in amended claim 1.

The Office also asserts that Poon discloses, “in another embodiment, on the transmission side, a header word is inserted (self definition information) where a modulation type flag is used on the transmission which are detected at the receiver side and configures the demodulation logic circuit (*receiver does not maintain a state capable of interpreting the selected data type*). (col. 3, lines 30-35; col. 4, lines 42-47; col. 9, lines 10-20 and col. 11, lines 39-56)”, and thus indicates that Poon discloses the feature “**sending the selected data type with the self-definition information to the receiver if the state capable of interpreting the selected data type has not been maintained by the receiver**” as recited in claim 1. However, a close reading of these cited parts reveals that this is not true. Referring to these cited parts of Poon as follows:

Col. 3, lines 30-35, Poon:

[0016] After the video information has been source coded and channel coded by the software-configurable modulator for a given format, it is ready for transmission. Note that prior to the transmission of the data, a header, e.g. a 3-bit header word: 000=VSB, 001=QAM, 010=DMT ect., can be inserted into the channel coding so as to provide an indication of the modulation type.

Col. 4, lines 42-47, Poon:

[0021] As to setting of the universal modem for modulation type or format as mentioned before, flags can be used on the transmission which are detected at the receive side. Alternatively, the channel to which the receiver is tuned can be detected. Moreover, a smart card or other similar device can be used to set the modulation type or format at the receive side.

Col. 9, lines 10-20, Poon:

Additionally, in one embodiment, the header of the input signal is stripped off and provided to a host processor 74 which determines from flags in the header the modulation format type. Alternatively, the host processor can determine the modulation format through channel input 76 from the channel select 73. In either event, the output of the host processor specifies the modulation format to a configuration controller 78, the purpose of which is to select from a configuration RAM 80 the appropriate demodulation mode to be downloaded to demodulator 84.

Col. 11, lines 39-56, Poon:

[0053] Referring now to Figure 12, a technique for detection of modulation types by the receiver involving the control of both the transmit side and the receive side and the use of modulation flags is presented. As can be seen, there is a transmit side 200 and a receive side 202, each having respective universal modems 204 and 206. A controller 208 is used to control universal modems 204 and 206 to set modulation type as illustrated at 210-220. Signals with the indicated modulation type are coupled to respective IF-RF stages 222. Note that a video source 224 is coupled to source coding 226 which is coupled to universal modem 204 to provide source material for transmission.

[0054] On the receive side, IF-RF stages 228 receive the transmission, with the received signals having formats 210-220. These signals are coupled to universal modem 206, with the decoded output placed on a bus 230, in one embodiment a 1394 bus.

It can be seen clearly that these portions taken from Poon, and relied upon by the Office, also do not mention anything about whether the receiver has the capability of interpreting an input signal (a selected data type), much less teaching the transmission side will transmit a modulation type flag if the state capable of interpreting the selected data type has not been maintained by the receiver.

Furthermore, the Office does not point out and the Applicant cannot find any parts of Poon that disclose “sending the selected data type **without self-definition information** to the receiver **if the state capable of interpreting the selected data type has been maintained by the receiver**” as claimed by the Applicant in claim 1.

In sum, Poon does not teach the feature “**determining whether a state capable of interpreting a selected data type has been maintained by a receiver**”, as claimed by the Applicant in amended claim 1, much less the claimed feature of **sending the selected data type**

**with or without self-definition information to the receiver based on the determination of whether the state capable of interpreting the selected data type has been maintained by the receiver.**

Kobayashi does not remedy this defect of Poon. Thus, even combined, Poon and Kobayashi do not teach or suggest each and every feature of amended independent claim 1, and thus do not render amended independent claim 1 obvious.

This argument also applies to independent claims 11, 15 and 22. Since the cited references do not render these independent claims obvious, the cited references do not render dependent claims of these independent claims obvious either, because any claim depending from a nonobvious independent claim is also nonobvious. *See* M.P.E.P. § 2143.03.

Accordingly, Applicant respectfully requests reconsideration of the rejections under 35 USC § 103(a), and allowance of claims 1-2, 4-11 and 13-22.

### **RESERVATION OF RIGHTS**

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

**CONCLUSION**

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (210) 308-5677 to facilitate prosecution of this Application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

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